

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT****REMARKS**

Claims 1-25, 27, 28, and 31-34 are pending in the present application. Claims 9 and 18-22 have been canceled herein without prejudice to their presentation in another application as being drawn to non-elected inventions. Claims 1, 8, 31, and 34 have been amended herein. No new matter has been added. Upon entry of the present amendment, claims 1-8, 10-17, 23-25, 27, 28, and 31-34 will remain pending.

The drawings have been objected to under 37 CFR 1.83(a) as not showing every detail of the claimed invention as recited in claims 10, 15 and 16. In particular, the Office Action asserts that the following elements are not depicted in the drawings: 1) driving mechanism internal to the dispensing mechanism; 2) dispensed volume replacement mechanism; 3) storage device connected to a dispensing mechanism and comprising a multi-well plate; and 4) positive displacement pump type dispensing mechanism.

In regard to the driving mechanism internal to the dispensing mechanism (item 1), Applicants have deleted this language from the claims.

The dispensed volume replacement mechanism (item 2) is described in detail at page 10, line 25 to page 11, line 20 of the specification referring to the features depicted in Figures 2A-2F. For example, Figures 2A through 2F show a variety of mechanisms that can be employed to allow replacement of the displaced sample 6 (i.e., dispensed volume replacement mechanisms). Such examples include, but are not limited to, a loose fitting lid 13, a tight fitting lid 13, a non-stretching membrane 14, a stretching membrane 15, a slot 16, a solid top with a one-way valve 17.

Because the multi-well plate element (item 3) is not recited in any of claims 10, 15 and 16, Applicant asserts that this objection to the drawings is inappropriate. However, the connection of the dispensing mechanism to the storage device is illustrated in Fig. 5A where (2) is the storage device and (3) is the sample dispensing mechanism.

The positive displacement pump type dispensing mechanism (item 4) is labeled as (3) on Fig 3A-3C and described from page 12, line 15 to page 13, line 21 of the specification.

In view of the foregoing, Applicant submits that the drawings comply with 37 CFR 1.83(a).

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT****I. The Claimed Invention Is Novel****A. The Wannlund Reference**

Claims 31 and 33 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 4,985,631 (hereinafter, the "Wannlund reference"). In addition, claims 32 and 34 are rejected under 35 U.S.C. §103(a) as allegedly being obvious in view of the Wannlund reference. Applicant respectfully requests reconsideration because the Wannlund reference does not teach every element of claim 31, as amended herein.

Claim 31 has been amended to recite that the driving mechanism is "positioned external to the dispensing mechanism and does not come into contact with said sample," support for which can be found at, for example, page 4, lines 26-30 of the specification. In contrast, it does not appear that any portion of the luminescence exposure apparatus of the Wannlund reference that can be considered to be a "driving mechanism" is positioned external to any portion that can be considered to be a "dispensing mechanism." Indeed, it appears that the pressure bar/diaphragm components of the Wannlund apparatus are internal to the dispensing mechanism and act internally to force the plug from the orifice to release the sample from the reservoir. In addition, there is no motivation that would impel one skilled in the art to make the many modifications in design that would allow the driving mechanism to be positioned external to the dispensing mechanism in the luminescence exposure apparatus of the Wannlund reference, let alone a reasonable expectation of success that it could even be accomplished. Thus, the Wannlund reference does not anticipate claims 31 or 33 or render obvious claims 32 or 34. Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. §102(b) and §103(a) be withdrawn.

**B. The Nishioka Reference**

Claims 1 and 23 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,874,971 (hereinafter, the "Nishioka reference"). Applicant respectfully requests reconsideration because the Nishioka reference does not teach every element of claim 1, as amended herein.

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT**

Claim 1 has been amended to recite that the driving mechanism is “positioned external to the dispensing mechanism and does not come into contact with said sample,” support for which can be found at, for example, page 4, lines 26-30 of the specification. In contrast, it does not appear that any portion of the ink jet cartridge of the Nishioka reference that can be considered to be a “driving mechanism” is positioned external to any portion that can be considered to be a “dispensing mechanism.” Indeed, the Office action states at page 5 that the driving mechanism is “internal to the dispensing mechanism.” Thus, the Nishioka reference does not anticipate claims 1 or 23. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §102(b) be withdrawn.

## **II. The Claimed Invention Is Not Obvious**

### **A. The Combination of the Karg, Moulton, Kath and Kimura References**

Claims 1-8, 10-14, 17, 24, 25, 27 and 28 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the combination of U.S. Patent No. 6,620,383 (hereinafter, the “Karg reference”) and U.S. Patent No. 6,063,282 (hereinafter, the “Moulton reference”), or U.S. Patent No. 5,516,491 (hereinafter, the “Kath reference”), or U.S. Patent No. 5,186,839 (hereinafter, the “Kimura reference”). Applicant respectfully requests reconsideration because the combination of the cited references fails to produce the claimed invention.

As stated above, claim 1 has been amended to recite that the driving mechanism is “positioned external to the dispensing mechanism and does not come into contact with said sample.” In contrast, it does not appear that any portion of the microvolume liquid dispensing device of the Karg reference that can be considered to be a “driving mechanism” is positioned external to any portion that can be considered to be a “dispensing mechanism.” Indeed, the Office action states at page 6 that the “driving mechanism (29) [is] internal to the dispensing mechanism (figs. 1-27).” In addition, there is no motivation in any of the cited references that would impel one skilled in the art to make the many modifications in design that would allow the driving mechanism to be positioned external to the dispensing mechanism in the microvolume liquid dispensing device of the Karg reference, let alone a reasonable expectation of success that it could even be accomplished. Thus, the combination of the cited references does not produce the

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT**

invention recited in claim 1, or any claim dependent thereon. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §103(a) be withdrawn.

**B. The Combination of the Maiefski, Moulton, Kath and Kimura References**

Claims 1, 8, 10, 15, 16, and 28 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the combination of U.S. Patent No. 5,976,470 (hereinafter, the "Maiefski reference") and the Moulton reference, or the Kath reference, or the Kimura reference. Applicant respectfully requests reconsideration because the combination of the cited references fails to produce the claimed invention.

As stated above, claim 1 has been amended to recite that the driving mechanism is "positioned external to the dispensing mechanism and does not come into contact with said sample." In contrast, it does not appear that any portion of the sample wash station assembly of the Maiefski reference that can be considered to be a "driving mechanism" is positioned external to any portion that can be considered to be a "dispensing mechanism." Indeed, the Office action states at page 10 that the "driving mechanism (134) [is] internal to the dispensing mechanism (figs. I-20)." In addition, there is no motivation in any of the cited references that would impel one skilled in the art to make the many modifications in design that would allow the driving mechanism to be positioned external to the dispensing mechanism in the sample wash station assembly of the Maiefski reference, let alone a reasonable expectation of success that it could even be accomplished. Thus, the combination of the cited references does not produce the invention recited in claim 1, or any claim dependent thereon. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §103(a) be withdrawn.

**III. The Claimed Invention Is Sufficiently Enabled**

Claims 10, 15, and 16 are rejected under 35 U.S.C. §112, first paragraph as allegedly failing to provide an enabling disclosure. The Office Action asserts that the specification does not reasonably provide enablement for the driving mechanism internal to the positive displacement pump-type dispensing mechanism. Solely to advance prosecution of the present application, claim 1 has been amended, as stated above, to recite that the driving mechanism is "positioned

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT**

external to the dispensing mechanism and does not come into contact with said sample." Thus, the present rejection has been rendered moot. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §112, first paragraph be withdrawn.

**IV. The Claims Are Clear And Definite**

Claims 1-8, 10-17, 23-25, 27, 28, and 34 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention. Applicant traverses the rejection and respectfully requests reconsideration in because the claims are clear and definite.

The Office Action asserts that claim 1 is incomplete because the structural relation with respect to the filter is missing. Claim 1 has been amended herein to delete recitation of the filter, thus rendering the rejection moot.

Claims 15 and 16 are alleged to be indefinite for referring to the actuator and driving mechanism as the same element. The amendment of claim 1 to eliminate the element of the driving mechanism internal to the dispensing mechanism obviates this rejection. The "actuator drive mechanism" (25) or (35), respectively, illustrated in Figs. 4, 5a and 5b, are the same elements, and the "electromagnetic" wording in Fig. 4 is used to distinguish one form of actuator drive mechanism from another general mechanism in Fig 5a and 5b. They also serve to drive the "actuator" (32) which is in physical contact with the sample. The actuator can be thought of as the feature that compresses the sample to force it out of the outlet valve, but the driving force is provided by the actuator drive mechanism.

Claim 23 is alleged to be indefinite in recitation of a filter. Applicant's amendment of claim 1 to delete recitation of the filter renders the rejection of claim 23 moot.

Claim 34 is alleged to be indefinite in that it is not clear whether there is more than one robot. Claim 32, upon which claim 34 is dependent, recites that the self-dispensing system comprises a robotic system comprising one or more robots. Claim 34, as amended herein, recites that the robot(s) can have "positioning and transferring features for locating said robots and said self-dispensing storage devices with respect to one another." Such embodiments are described at, for example, page 22, line 5 to page 24, line 6 of the specification.

**DOCKET NO.: IBIS0056-100 (IBIS-0038US)****PATENT**

In view of the foregoing, the claims are clear and definite. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §112, second paragraph be withdrawn.

**V. Conclusion**

In view of the foregoing, Applicant respectfully submits that the claims are in condition for allowance. An early notice of the same is earnestly solicited. The Examiner is invited to contact Applicant's undersigned representative at (215) 665-6914 if there are any questions regarding Applicant's claimed invention.

Respectfully submitted,

  
\_\_\_\_\_  
Paul K. Legaard, Ph.D.

Registration No. 38,534

Date: 5 August 2004

COZEN O'CONNOR  
1900 Market Street  
Philadelphia, PA 19103-3508  
Telephone: (215) 665-6914  
Facsimile: (215) 701-2141